

# **- FACT SHEET -**

## **San Antonio Bioterrorism Preparedness: Smallpox Vaccine**

Smallpox is a serious, contagious and sometimes fatal infectious disease. There is no specific treatment for smallpox disease.

### **How is smallpox prevented?**

Smallpox is prevented through the vaccination and isolation of confirmed cases.

### **How does smallpox spread?**

Generally, direct and fairly prolonged face-to-face contact is required to spread smallpox from one person to another. Smallpox also can be spread through direct contact with infected bodily fluids or contaminated objects such as bedding or clothing. Rarely, smallpox has been spread by virus carried in the air in enclosed settings such as buildings, buses, and trains.

A person with smallpox is sometimes contagious with onset of fever, but the person becomes most contagious with the onset of rash. At this stage the infected person is usually very sick and not able to move around in the community. The infected person is contagious until the last smallpox scab falls off.

### **Who should be vaccinated first and why?**

First response public health workers and the health care community. They will be the first to see any patients.

### **What is the vaccine for smallpox?**

The vaccine is a live virus. It is not smallpox virus. It is a close cousin called vaccinia derived from cows.

The vaccinia virus, the virus in the smallpox vaccine, is another "pox"-type virus. Vaccinia is related to smallpox, but milder. The vaccinia virus may cause rash, fever, and head and body aches. In certain groups of people, complications from the vaccinia virus can be severe. Vaccinia is spread by touching a vaccination site before it has healed or by touching bandages or clothing that have been contaminated with live virus from the smallpox vaccination site. This way, vaccinia can spread to other parts of the body or to other individuals. This is called inadvertent inoculation. In the past, spreading to other parts of the vaccine recipients' body was the more common form of inadvertent inoculation. Careful care must be taken of the site of the vaccine to prevent spreading of the virus.

### **What should the average person know about smallpox?**

Smallpox is an acute, contagious, and sometimes fatal disease caused by the variola virus and marked by fever and a distinctive progressive skin rash. In 1980, the disease was declared eradicated following worldwide vaccination programs. However, in the aftermath of the events of September and October 2001, the U.S. government is taking precautions to be ready to deal with a bioterrorist attack using smallpox as a weapon. As a result of these efforts: 1) there is a detailed nationwide smallpox response plan designed to quickly vaccinate people and contain a smallpox outbreak and 2) there is enough smallpox vaccine to vaccinate everyone who would need it in the event of an emergency.

### **How serious is the smallpox threat?**

The deliberate release of smallpox as an epidemic disease is now regarded as a possibility, and the United States is taking precautions to deal with this possibility.

Smallpox is classified as a Category A agent by the Centers for Disease Control and Prevention. Category A agents are believed to pose the greatest potential threat for adverse public health impact and have a moderate to high potential for large-scale dissemination. The public is generally more aware of category A agents, and broad-based public health preparedness efforts are necessary. Other Category A agents are anthrax, plague, botulism, tularemia, and viral hemorrhagic fevers.

### **Who should NOT get the smallpox vaccine?**

People most likely to have side effects are people who have, or even once had, skin conditions, (especially eczema or atopic dermatitis) and people with weakened immune systems, such as those who have received a transplant, are HIV positive, or are receiving treatment for cancer.

Anyone who falls within these categories, or lives with someone who falls into one of these categories, should NOT get the smallpox vaccine unless they are exposed to the disease. Pregnant women should not get the vaccine because of the risk it poses to the fetus. Women who are breastfeeding should not get the vaccine. Anyone who is allergic to the vaccine or any of its components should not get the vaccine. Children younger than 12 months of age should not get the vaccine. Also, the Advisory Committee on Immunization Practices advises against non-emergency use of smallpox vaccine in children younger than 18 years of age.

### **If I am concerned about a smallpox attack, can I go to my doctor and get the smallpox vaccine?**

At the moment, the smallpox vaccine is not available for members of the general public. In the event of a smallpox outbreak, however, there is enough smallpox vaccine to vaccinate everyone who would need it.